Please accept this corrected version of my email of Feb. 13, 2003.

----Original Message----

From: Frank Hammes

Sent: Fri 2/13/2004 6:21 PM

To: MAbeysuriya@icfconsulting.com Cc: Fanara.Andrew@epamail.epa.gov

Subject: Draft 2

Dear Mr. Fanara,

I am very disappointed with the Draft 2 of the Energy Star Program Requirements for Room Air Cleaners, as it would clearly cause more manufacturers to make inferior air cleaners. The Energy Star Program would contribute to the decline of air cleaner performance.

Air cleaner manufacturers will switch from filters capable of filtering ultra-fine particles, to filters only able to filter coarse particles (definition: 0.3 microns and larger), as coarse particles are the only particles tested in the CADR dust rating. Air cleaner manufacturers will eliminate pre-filters in an effort to maximize short-term performance, sacrificing solid long-term performance, as pre-filters can reduce airflow and therefore the CADR rating. The few air cleaner manufacturers using effective granular carbon filters to remove gases will switch to ineffective carbon pads that don't reduce airflow and their CADR rating. The result will be that EPA Energy Star will soon be ridiculed as a distinction bestowed upon air cleaners with limited performance. In the long run, this will hurt the entire Energy Star Program.

As President and CEO of IQAir North America and Director of Research and Development of manufacturing, I know exactly how to create the perfect air cleaner to qualify for the Energy Star Program. My new air cleaner:

- would not have a pre-filter (as long-term performance doesn't matter),
- 2. use a synthetic, electrostatic (vs. fiberglass-based HEPA) filter that only traps course dust initially the effeciency would dramatically decrease within days. But that doesn't matter, because it doesn't matter to Energy Star.
- 3. I would switch the granular carbon filter for a ineffective carbon pad. I still need to offer something "extra" so that the customer feels that he is getting an additional benefit. I would offer a product which would be ineffective in the removal of gaseous contaminants, but that would matter, since it doesn't matter to Energy Star.
- 4. I would generate some "sanitizing" ozone, just under 50 ppb. It will still be strong enough to mask odors and is an another "extra." The fact that it will land a few asthma sufferers in the emergency room wouldn't matter. It doesn't matter to Energy Star.
- 5. Finally, I would add a strong ionizer so that whatever coarse particles that my filter doesn't trap, stick to the chamber walls. In the real world, there would be one additional surface: the lungs of the occupants in the room. But that doesn't matter, because it doesn't matter to Energy Star.

This product would have highest CADR dust rating ever and qualify for Energy Star. Unfortunately this air cleaner would only be effective for filtering less than 10% of the particles in the air, since 90% of all airborne particles are smaller than 0.3 microns. Additionally, it would be potentially harmful to asthma sufferers and other sensitive individuals - exactly the people that purchase the most air cleaners.

Fortunately, IQAir is a company lead by its core values, not greed. But there are plenty of companies willing to sell their soul for a buck or two. The Energy Star Program will give them more opportunities to do just that.

Yours truly,

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